

Abstract of the disclosure

A workpiece transfer for a decorating machine includes transport conveyors for carrying workpieces to the decorating machine and from the decorating machine. The conveyors support each of the workpieces such that an elongated longitudinal axis of each workpiece is vertically orientated. The decorating machine has a decorator conveyor with spaced workpiece carriers to support a workpiece for rotation about the longitudinal axis of the workpiece in a horizontal orientation. A plurality of workpiece grippers pivotally supported by a drive hub support the workpieces during movement of the longitudinal axis thereof between the vertical orientation and the horizontal orientation. A drive shaft is secured to the drive hub to rotate about an axis forming acute angles with the longitudinal axis of a workpiece in each of the horizontal orientation and the vertical orientation. The acute angles are preferably 45° . The pivotal axis of the pivots used to support the workpiece grippers on the drive hub extend in a plane perpendicular to the axis about which the drive shaft rotates. Control rods are slidably supported and interconnect the workpiece grippers with cam followers residing in a cam track of a stationary barrel cam for pivotally displacing the workpiece grippers for controlling the delivery and reception orientations of workpieces with respect to the transport conveyor and the decorator conveyor. Pivoting of the control rods by the cam occurs in a timed relation with rotary motion of the workpiece gripper for continuous motion of a workpiece in a substantially matched speed and direction of conveyance by the workpiece conveyors and the decorating conveyor.